



## A B S T R A C T

The invention relates to a method and to apparatus for attenuating externally originating noise reaching the eardrum while still enabling communication via an electro-acoustic path. 

Apparatus according to the invention comprises passive attenuation means disposed about each ear and delimiting a cavity (10). In addition it includes active attenuation means comprising a loudspeaker (6) placed inside the cavity (10) and a microphone (8) placed in the external ear duct or at the inlet thereto, said loudspeaker and microphone being interconnected by a constant gain amplifier (11) and an active analog filter (12) of the polynomial type, with the passive components thereof being designed to provide a given transfer function. 

One application lies in the construction of protective headsets fitted with incorporated loudspeakers enabling electro-acoustic communication.